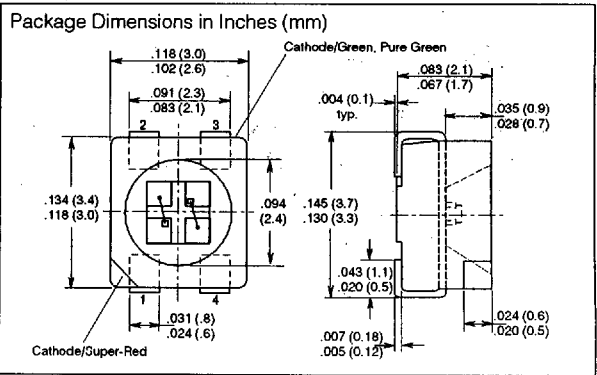
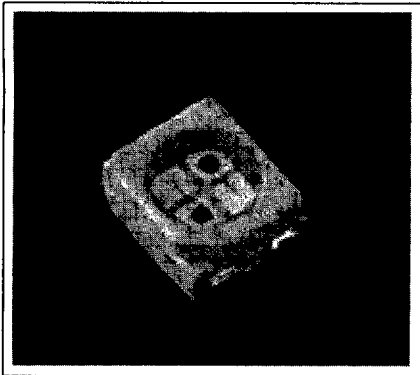


SIEMENS

SUPER-RED/GREEN LSG T670-HO SUPER-RED/PURE GREEN LSP T670-GO SMT-MULTILED®, Surface Mount LED Lamp



FEATURES

- PL-CC-2 Package
- Multicolor Operation
- Suitable for Surface Mounting
- Available on Tape and Reel (8 mm Tape)
- Applications: Backlighting, Optical Coupling into Light Pipes and Lenses, Optical Indicator

DESCRIPTION

The LSG T670 (MULTILED for surface mount applications) is available in super-red/green and super-red/pure green. The four lead design allows the user to lay out a P.C.B. for completely independent access to the super-red or green/pure green LED, common cathode or common anode arrangements or in an anti-parallel configuration.

The package includes an internal reflector to optimize light coupling. This feature makes this MULTILED ideal for light pipe applications.

Maximum Ratings

Operating Temperature Range (T_{OP}) -55°C to $+100^{\circ}\text{C}$
 Storage Temperature Range (T_{STG}) -55°C to $+100^{\circ}\text{C}$
 Junction Temperature (T_J) $+100^{\circ}\text{C}$
 Forward Current (I_F) 30 mA
 Surge Current (I_{FS}) $t_p \leq 10 \mu\text{s}$, $D=0.005$ 0.5 A
 Reverse Voltage (V_R) 5 V
 Power Dissipation (P_{TOT}) $T_A \leq 25^{\circ}\text{C}$ 190 mW
 Thermal Resistance, Junction to Ambient

Mounting on PC Board, Copper area: 16 mm^2 (R_{thJA}) 300 K/W

Characteristics ($T_A=25^{\circ}\text{C}$) All values typical unless otherwise noted

Parameter	Symbol	Super-			Unit
		Red	Green	Pure Green	
Peak Wavelength (typ.) ($I_F=10 \text{ mA}$)	λ_{PEAK}	635	565	557	nm
Dominant Wavelength (typ.) ($I_F=10 \text{ mA}$)	λ_{DOM}	628	570	560	nm
Spectral Bandwidth, 50%, I_V (typ.) ($I_F=10 \text{ mA}$)	$\Delta\lambda$	45	25	22	nm
Viewing Angle, 50%, I_V (typ.)	2ϕ	120	120	120	Deg.
Forward Voltage ($I_F=10 \text{ mA}$)	V_F	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	V
Reverse Current ($V_R=5 \text{ V}$)	I_R	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	μA
Capacitance ($V_R=0 \text{ V}$, $f=1 \text{ MHz}$)	C_0	12	15	15	pF
Switching Time ($I_F=100 \text{ mA}$, $t_p=10 \mu\text{s}$, $R_L=50 \Omega$)					
Rise Time/ I_V , 10%–90%	t_R	300	450	450	ns
Fall Time/ I_V , 90%–10%	t_F	150	200	200	ns
Luminous Intensity ($I_F=10 \text{ mA}$)	I_V	8 (≥ 2.5)	5 (≥ 1.6)		mcd
Luminous Flux ($I_F=10 \text{ mA}$)	Φ_V	25	15		mlm

Notes

1. Luminous intensity ratio in one LED $I_{Vmax}/I_{Vmin} \leq 3^*$ or $\leq 4^{**}$.
2. Luminous intensity ratio in one packaging unit $I_{Vmax}/I_{Vmin} \leq 2$.
3. The brightness of the darker chip in one package determines the brightness group of the LED.

See graph numbers 1, 2V, 5G, 6H in the back of this section.